

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A sensor adapted to measure the concentration or presence/absence of carbon dioxide in respiratory gas from a living body, comprising:
 - a light-emitting light element operable to emit light;
 - a light-receiving element adapted to receive the light emitted from the light-receiving element;
 - a support member supporting the light-emitting element and the light-receiving element such that they are opposed to each other on a single optical axis, the support member having a size adapted to contact a part between nostrils and a mouth of the living body; and
 - a respiratory flow path formed in the support member so as to cross over the optical axis and adapted to allow the respiratory gas to pass therethrough when the support member is located between the nostrils and the mouth,

wherein the respiratory flow path is an open channel.

2. (canceled).

3. (previously presented): The sensor as claimed in claim 1, further comprising ear straps adapted to be hooked around ears of the living body for holding the supporting member below the nostrils.

4. (previously presented): The sensor as claimed in claim 3, wherein the ear straps include at least one of a first lead wire for supplying power to the light-emitting element and a second lead wire for outputting a signal detected by the light-receiving element.

5. (previously presented): The sensor as claimed in claim 1, further comprising an engagement member provided as a part of the support member and adapted to be engaged with a tubular member for supplying oxygen to the nostrils.

6. - 8. (canceled).

9. (previously presented): The sensor as claimed in claim 1, further comprising a mouth-side guide member attached on the support member and adapted to guide respiratory gas from the mouth to the respiratory flow path.

10. (currently amended): A sensor adapted to measure a concentration or presence/absence of carbon dioxide in respiratory gas from a living body, comprising:

a light-emitting element operable to emit light;

a light-receiving element adapted to receive the light emitted from the light-emitting element;

an oxygen mask adapted to cover a part of a face of the living body to supply oxygen to the living body;

a support member supporting the light-emitting element and the light-receiving element such that they are opposed to each other on a single optical axis, the support member being

disposed on an interior surface of the oxygen mask and having a size adapted to contact a part between nostrils and a mouth of the living body; and

a respiratory flow path formed in the support member so as to cross over the optical axis and so as to communicate with an interior of the oxygen mask, the respiratory flow path being adapted to allow the respiratory gas to pass therethrough when the oxygen mask covers the part of the face,

wherein the respiratory flow path is an open channel.

11. -12. (canceled).

13. (currently amended): A sensor adapted to measure a concentration or presence/absence of carbon dioxide in respiratory gas from a living body, comprising:

a light-emitting element operable to emit light;

a light-receiving element adapted to receive the light emitted from the light-emitting element;

an airway case having a size adapted to contact a part between nostrils and a mouth of the living body, and having a pair of openings opposing to each other;

a respiratory flow path formed in the airway case so as to extend between the openings, and adapted to allow the respiratory gas to pass therethrough when the airway case is located between the nostrils and the mouth;

a pair of transparent thin films respectively sealing the openings; and

a pair of supporting members respectively supporting the light-emitting element and the light-receiving element such that they are opposed to each other on a single optical axis through the openings,

wherein the respiratory flow path is an open channel.

14. (previously presented): The sensor as claimed in claim 13, wherein the thin films are anti-fogging films.

15. (previously presented): The sensor as claimed in claim 13, wherein said supporting members are removably engaged with the light emitting element and the light-receiving element respectively.

16. (canceled).

17. (previously presented): The sensor as claimed in claim 13, further comprising a mouth-side guide member attached on the airway case and adapted to guide respiratory gas from the mouth to the respiratory flow path.

18. (previously presented): The sensor as claimed in claim 9, wherein the mouth-side guide member is removably engaged with the support member.

19. (canceled).

20. (previously presented): The sensor as claimed in claim 17, wherein the mouth-side guide member is removably engaged with the airway case.

21. (currently amended): An airway case adapted to be used when a concentration of presence/absence of carbon dioxide in respiratory gas from a living body is measured with a light-emitting element emitting light and a light-receiving element receiving the light emitted from the light-emitting element, the airway of the case comprising:

a support member supporting the light-emitting element and the light-receiving element such that they are opposed to each other on a single optical axis, the support member having a size adapted to contact a part between nostrils and a mouth of the living body; and

a respiratory flow path formed in the support member so as to cross over the optical axis, and adapted to allow the respiratory gas to pass therethrough when the support member is located between the nostrils and the mouth,

wherein the respiratory flow path is an open channel.

22. - 23. (canceled).

24. (previously presented): The airway case as claimed in claim 21, further comprising:

a mouth-side guide member attached on the support member and adapted to guide the respiratory gas from the mouth to the respiratory flow path.

25. (canceled).

26. (previously presented): The airway case as claimed in claim 24, wherein the mouth-side guide member is removably engaged with the airway case.

27. (previously presented): The sensor as claimed in claim 37, wherein the nasal-side guide member has a base portion at which the nasal prongs are integrated so as to form a Y-shaped respiratory flow path.

28. (previously presented): The airway case as claims in claim 40, wherein the nasal-side guide member has a base end portion at which the nasal prongs are integrated so as to form a Y-shaped respiratory flow path.

29. (previously presented): The sensor as claimed in claim 34, wherein the nasal-side guide member has a base portion at which the nasal prongs are integrated so as to form a Y-shaped respiratory flow path.

30. (previously presented): The sensor as claimed in claim 9, wherein the mouth-side guide member having an opening adapted to cover at least a part of the mouth while extending in a direction that is substantially parallel with at face of the living body.

31. (previously presented): The sensor as claimed in claim 17, wherein the mouth-side guide member having an opening adapted to cover at least a part of the mouth while extending in a direction that is substantially parallel with a face of the living body.

32. (previously presented): The airway case as claimed in claim 24, wherein the mouth-side guide member having an opening adapted to cover at least a part of the mouth while extending in a direction that is substantially parallel with a face of the living body.

33. (previously presented): The sensor as claimed in claim 1, further comprising a nasal-side guide member adapted to introduce the respiratory gas from the nostrils to the respiratory flow path.

34. (previously presented): The sensor as claimed in claim 33, wherein the nasal-side guide member has two nasal prongs adapted to be inserted into the nostrils when the support member is located between the nostrils and the mouth.

35. (previously presented): The sensor as claimed in claim 33, wherein the nasal-side guide member comprises a funnel-shaped member.

36. (previously presented): The sensor as claimed in claim 13, further comprising a nasal-side guide member adapted to introduce the respiratory gas from the nostrils to the respiratory flow path.

37. (previously presented): The sensor as claimed in claim 36, wherein the nasal-side guide member has two nasal prongs adapted to be inserted into the nostrils when the support member is located between the nostrils and the mouth.

38. (previously presented): The sensor as claimed in claim 36, wherein the nasal-side guide member comprises a funnel-shaped member.

39. (previously presented): The airway case as claimed in claim 21, further comprising a nasal-side guide member adapted to introduce the respiratory gas from the nostrils to the respiratory flow path.

40. (previously presented): The airway case as claimed in claim 39, wherein the nasal-side guide member has two nasal prongs adapted to be inserted into the nostrils when the support member is located between the nostrils and the mouth.

41. (previously presented): The airway case as claimed in claim 39, wherein the nasal-side guide member comprises a funnel-shaped member.

42. - 43. (canceled)